

REMARKS

In response to the Office Action mailed March 17, 2004, Applicants respectfully request reconsideration.

As a preliminary matter, Applicants note with appreciation the indication of allowable subject matter in claims 2, 3 and 5-8.

Claims 1-3, 5, 6 and 9 have been amended solely for clarification, not in response to any rejection or art of record.

1. Claims 1-8 and 19 Patentably Distinguish over Applicants' Prior Art

Claim 1 stands rejected under 35 U.S.C. §102(a) as purportedly being anticipated by Applicants' Prior Art (APA). Applicants respectfully traverse this rejection.

APA shows in Figure 1 a conventional architecture of a portable phone transmission system 10. (Page 1, lines 13-14). System 10 includes a calculator 18 (F) that provides a digital control signal N_C . This digital control signal is converted into an analog control signal V_C , which drives an amplifier 12. (Page 1, lines 22-24)

Contrary to the assertions of the Office Action (Page 2, Section 2), APA does not teach that a new value of the digital control signal N_C is determined from the difference between a signal linked to the output signal and a *last determined value of the control signal N_C multiplied by a selected factor*. This teaching is not found on page 2, lines 6-10 and 18-19 as suggested by the Office Action. Rather, APA teaches that each new digital value is determined from the difference between the signal linked to the output signal, V_D and a *reference value V_{REF}* , generally a constant voltage, provided by generator 24 (Fig. 1; page 1, line 32 – page 2, line 5). Specifically, signal V_D and reference signal V_{REF} are provided to the non-inverting (+) and inverting input (-), respectively, of comparator 22. The output of this comparator, V'_D , is converted to a digital detection value N'_D and transmitted to calculator 18. Calculator 18 then determines the value of N_C based on N'_D and P_{REF} , a reference value. (Page 2, lines 1-10).

Claim 1 patentably distinguishes over APA because APA does not teach or suggest a method for controlling in closed loop an analog system generating an output signal from a control signal, wherein the control signal is a series of digital values, each new digital value being determined from a difference between a signal linked to the output signal and a **last determined value of the control signal multiplied by a selected factor**. Rather, APA indicates

that each new digital value is determined from a difference between a signal linked to the output signal and *a provided reference signal*, which is generally a constant voltage.

In view of the foregoing, claim 1 is not anticipated by APA. Accordingly, Applicants respectfully request that the rejection of claim 1 under §102(a) be withdrawn. Claims 2-8 and 19 each depend from claim 1 and are patentable for at least the same reasons. Accordingly, Applicants respectfully request that the rejection of claim 4 under §102(a) be withdrawn.

2. Claims 9-18 Patentably Distinguish over APA

Claims 9 and 10 stand rejected under 35 U.S.C. §102(a) as purportedly being anticipated by APA. Applicants respectfully traverse this rejection.

Claim 9 patentably distinguishes over APA because APA does not teach or suggest a device for controlling an analog system providing an analog output signal, comprising, *inter alia*, a digital system providing a digital control signal, a digital-to-analog converter receiving the digital control signal and providing an analog control signal to the analog system, a sensor measuring an analog signal representative of the analog output signal, and a comparator providing an analog detection signal based on the representative analog signal **and on the analog control signal**, as recited in claim 9. Rather, the comparator in APA provides an analog detection signal V'_D based on the representative analog signal V_D *and a reference signal V_{REF}* , which is generally a constant voltage.

In view of the foregoing, claim 9 is not anticipated by APA. Accordingly, Applicants respectfully request that the rejection of claim 9 under §102(a) be withdrawn. Claims 10-18 each depend on claim 9 and are patentable for the same reasons. Accordingly, Applicants respectfully request that the rejection of claim 10 under §102(a) be withdrawn.

3. Added claims 20-46 Patentably Distinguish over the Art of Record

New claim 20 patentably distinguishes over the art of record, including APA, because the art of record does not teach or suggest a method of controlling a system that generates an output signal, the method comprising acts of: controlling a value of the output signal at least in part, with a control signal, multiplying a last-determined value of the control signal by a factor to produce a product, **comparing a value of the product to a value of a signal representative of the output signal**, and generating a new value of the control signal based on the comparison, as recited in claim 20.

In view of the foregoing, Applicants respectfully submit that claim 20, and its dependent claims 21-32, are in condition for allowance.

Claim 34 patentably distinguishes over the art of record because the art of record does not teach or suggest an apparatus for controlling a system that provides an output signal, the system comprising a controller to generate a control signal that controls the system, a multiplication component to multiply a last-determined value of the control signal by a factor to produce a product, a comparator to compare **a value of the product** to a value of a signal representative of the output signal, wherein the controller is operative to generate a new value of the control signal based on the comparison, as recited in claim 34.

In view of the foregoing, Applicants respectfully submit that claim 33, and its dependent claims 34 - 46, are in condition for allowance.


CONCLUSION

In view of the foregoing amendments and remarks, this application should now be in condition for allowance. A notice to this effect is respectfully requested. If the Examiner believes, after this amendment, that the application is not in condition for allowance, the Examiner is requested to call the Applicants' attorney at the telephone number listed below.

If this response is not considered timely filed and if a request for an extension of time is otherwise absent, Applicants hereby request any necessary extension of time. If there is a fee occasioned by this response, including an extension fee that is not covered by an enclosed check, please charge any deficiency to Deposit Account No. 23/2825.

Respectfully submitted,
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